

Work on a Relativistic Klystron Two-Beam Accelerator Prototype*

T. Houck[†], D. Anderson, S. Eylon, G. Giordano, E. Henestroza, S. Lidia,
L. Reginato, D. Vanecek, G. Westenskow[†], and S. Yu

*Lawrence Berkeley National Laboratory, 1 Cyclotron Road, Berkeley, CA 94720 USA
and*

[†]Lawrence Livermore National Laboratory, P.O. Box 808, Livermore, CA 94550 USA

Abstract. A prototype rf power source based on the Relativistic Klystron Two-Beam Accelerator (RK-TBA) concept is being constructed at the Lawrence Berkeley National Laboratory to study physics, engineering, and costing issues. The prototype is described and compared to a full scale design appropriate for driving the Next Linear Collider (NLC). Specific details of the induction core tests and pulsed power system are presented. The 1-MeV, 1.2-kA induction gun currently under construction is also described in detail.

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